Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)

2. (Currently Amended) The boring head as claimed in ~~claim 1,~~ claim 4, wherein the ratio of the first ~~epicyclical gear~~ train is 1/1.008, ~~while that of~~ and the ratio of the second train is 1.0008.

3. (Currently Amended) The boring head as claimed in ~~claim 1,~~ claim 4, wherein the electric motor driving the cage of the first ~~epicyclical gear~~ train is ~~of~~ a brushless ~~type, with~~ type with a built-in encoder.

4. (New) A boring head with a cutting advance independent of rotation, comprising:

a body which can be connected to a spindle quill of a machine tool, the spindle quill being movable at least by electric means;

an intermediate shaft capable of being connected in terms of rotation to a spindle arranged in the spindle quill, the spindle being connected to an electric motor capable of driving the spindle at a variable rotational speed under control of a programmer or other equivalent programmable command and control unit;

a carriage including a rack, the carriage capable of being moved radially by the rack meshing with a set of teeth of a driving pinion arranged in the body;

a tool holder fixed to a free end of the carriage, the free end being opposite the rack; and

two epicyclical gear trains, in cascade, that provide a transmission of rotational movement to the driving pinion of the carriage, the epicyclical gear trains comprising:

a first train including a cage mounted so that the cage can rotate about the intermediate shaft, including a crown wheel that meshes with a pinion fitted onto the shaft of an electric motor carried by the body, and carrying at least two superposed planet pinions mounted so that the at least two superposed planet pinions are free to rotate in the cage, an upper one of the planet pinions meshes with a set of teeth formed around the intermediate shaft, and a lower one of the planet pinions meshes with an output sun gear;

a second train including a sun gear secured to the output sun gear of the first train, the sun gear meshing with an upper planet pinion of at least one set of superposed planet pinions mounted so that the at least one set of superposed planet pinions are free to rotate in the body, a lower planet pinion of the at least one set of superposed planet pinions meshing with a set of teeth formed on the driving pinion of the carriage, and the set of teeth formed on the driving pinion of the carriage being distinct from the set of teeth of the driving pinion that meshes with the rack of the carriage,

wherein, the first train and the second train include ratios which are other than 1 and an inverse, while the electric motor driving the cage and the electric means translating the quill are powered under control of the command and control unit.